DOCUMENT RESUME

ED 040 038 SE 008 010

TITLE Report on Conservation and Outdoor Science Education

in California, 1966-67.

INSTITUTION Association for Outdoor Education, Inc., Sacramento,

Calif.: California State Dept. of Education,

Sacramento.; Department of Agriculture, Washington,

D.C. Forest Service.

PUP DATE Jul 68 NOTE 21p.

EDRS PRICE EDRS Price MF-\$0.25 HC-\$1.15

DFSCRIPTORS *Conservation Education, *Educational Legislation,

*Environmental Education, Government Role, *Outdoor Education, *Program Descriptions, Science Education

History

IDENTIFIERS California

ABSTRACT

Outlined is the history of conservation and outdoor education with special emphasis on California. The roles of Californian state agencies and professional organizations are described. Purposes and programs of the Association for Outdoor Education are outlined and Californian legislation related to provision of outdoor education, authorization of forestry courses, and the role of county superintendents of schools is cited. An account is given of recently developed programs, including ESEA Title I and Title III projects as well as programs developed by local school districts. An appendix gives data on resident outdoor education programs 1965-67, and on use by counties of field trips and school nature areas. A selected bibliography is included. (EB)



THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR GPGAMZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT "ECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

REPORT ON

CONSERVATION AND

OUTDOOR SCIENCE EDUCATION

IN CALIFORNIA

1966-67

A summary of information regarding both resident and day classes conducted in California outdoor schools and nature centers.

Prepared by Members of the
ASSOCIATION FOR OUTDOOR EDUCATION, INC.
With the Assistance of
Forest Service
U. S. Department of Agriculture
and
California State Department of Education

Published By
THE RESOURCES AGENCY OF CALIFORNIA
July, 1968

A DYNAMIC APPROACH TO INTENSIFIED AND MEANINGFUL EDUCATION

Why Outdoor Education

The extension of the school curriculum into the out-of-doors has been one of the most significant developments in education. Outdoor education is defined as all those things which can be learned best outside of the classroom and closest to nature itself. Education in the out-of-doors is a logical development of this mid-century. It is no mere accident or promotional scheme that there is a great surge into the out-of-doors for a great variety of activities -- both educational and recreational. The pressures of modern living, rapid urbanization of California's population, and the monotony of a mech/mical world have created the need for a return to the land. Outdoor education provides exciting avenues of learning, and, by using one of the most modern and abundantly-equipped of classrooms -- the outdoors-- helps meet these special needs of modern man.

California Is Ideally Equipped by Nature

California is fortunate because it has an abundance and variety of areas suitable for outdoor education. More than 1,000 miles of tidelands which provide excellent marine laboratories, wooded areas in the mountains and on the foothills, extensive agricultural areas, rivers and streams, and vast deserts all combine to provide a wide range of opportunities for outdoor education experiences to capture the interest and challenge the imagination of any group of children and youth. In many parts of the state the climate is comfortable enough for outdoor experiences all through the year.

From "A FRAMEWORK FOR PUBLIC EDUCATION IN CALIFORNIA"

The following statement from "A FRAMEWORK FOR PUBLIC EDUCATION IN CALIFORNIA" clearly describes the rationale for providing experiences in public school programs that lead to an understanding of one's physical environment:

I A FRAMEWORK FOR PUBLIC EDUCATION IN CALIFORNIA. Bulletin of the California State Department of Education, Vol. XIX, No. 6, November, 1950, pg. 12



"Education must provide the knowledge that will help individuals to understand the physical world in which man lives and the effect of the physical world upon the way he lives. As individuals participate in the major human activities in which man engages to meet his basic human needs, they grow in understanding and appreciation of the relation of man to his environment and his dependence upon it. Experiences should be provided which acquaint the learner with the natural resources of the world, the ways in which they are processed, and the need for their wise use. Further experiences should be provided to develop understanding of the ways in which man has used his knowledge in the various sciences to extend and to control his environment.

"Opportunity to seek, to understand, and to enjoy the beauties of nature should be included. Outdoor experiences of a wide variety help to acquaint the learner with the physical world about him and help him to appreciate its infinite variation."

HISTORICAL DEVELOPMENT OF CONSERVATION AND OUTDOOR EDUCATION

Early American Origins of the Movement

One of the earliest situations devoted to experiences in the outdoors was established at Lake Chautaqua, New York, in 1872. Numerous permanent institutions were developed as imitations of earlier forms of outdoor living. Learning experiences were largely devoted to adults and families. Out of this tradition were established outdoor centers for art, music, dramatics, and other cultural activities.

The 1920s

World War I played a dramatic role in the realization that outdoor situations were ideal for a speeded up and realistic learning experiences. Since the 1920s the out-of-doors study became more and more regarded as a vital form of education. Education in democratic methods and in the human relations necessary for a functional democracy became an important purpose of outdoor programs.

The 1930s

By the late 1930s it was evident that educational emphasis was being focused upon the concept of the "whole child." Outdoor experiences clearly had implications for this view of education. Another unique function of outdoor education -- the teaching of outdoor skills -- had been added, too. In addition, the indisputable value of meaningul work experiences in the outdoors became obvious. The opportunity to learn more about the outdoors, which



was becoming more unknown to most of our school children because of changing living conditions, was also an increasingly important phase of outdoor programs.

The Outdoor Area in Action

The Civilian Conservation Corps -- the largest single outdoor program ever operated in the United States in peace time -- combined field studies with work experiences. Outdoor programs with special purposes siso became useful in coordinating education with various public concerns. Conservation of natural resources is an example.

Kellogg Foundation Helps Mobilize for Action

It remained for the Kellogg Foundation to bring three powerful and natural movements into a close working relationship for the good of thousands of children and youth. Organized outings, organized recreation, and public education all came to realize that while each might have peculiar and distinct program segments and techniques, all experiences are educational under appropriate circumstances. In 1940 the Kellogg Foundation inaugurated a very successful, experimental, community outdoor school in Michigan. This program provided personnel and experience for many similar projects which followed dramatically. The Foundation, together with the American Camping Association, provided a number of workshops for the pooling of newfound knowledge and experience.

California on the Move

The California development in the area of outdoor education began in San Diego with group planning in 1942 and 1943 which culminated in the formation of the San Diego City-County Camp Commission. Their efforts were rewarded when the State Park Commission, in 1944, agreed to a long-term lease of camp facilities at Cuyamaca State Park. Subsequently the Camp Commission acquired permanent title to the facilities through special legislation. The year 1946 marked the beginning of actual operation of the San Diego outdoor school project. A Kellogg Foundation Workshop at Camp Palomar in San Diego County in 1950 was important in launching a rapid succession of other school outdoor education projects over the state. The steady increase in number of school districts participating in outdoor education has been dramatic proof of the successful influence of pioneers in this movement.



Dramatic Growth

Dramatic in the growth of outdoor education in California has been the steady acquisition and development of additional outdoor facilities by many school districts, notatly San Diego and Long Beach. The latter district operates three separate outdoor education centers which handle the entire sixth grade population of the district. San Diego has added a third site for the same reason. Many school districts are now staffing and equipping their centers to provide for school outdoor education during all or part of the school year, and recreational camping by students and citizens of the entire community in the remaining portions of the year.

THE GROWTH OF OUTDOOR EDUCATION IN CALIFORNIA FROM THE PILOT SAN DIEGO PROJECT IN 1946 TO THE PRESENT STATE-WIDE PROGRAM INVOLVING WELL OVER 57,000 SCHOOL CHILDREN FROM 1,917 CLASSES REPRESENTING 923 SCHOOLS IN 209 SCHOOL DISTRICTS IS ASTOUNDING. IT IS STRONG TESTIMONY TO THE EFFECTIVENESS, IMPACT AND EDUCATIONAL IMPORTANCE OF OUTDOOR EDUCATION.

County Superintendents of Schools

One of the most promising trends in the last few years is the enthusiastic support and promotional leadership given the movement by county superintendents of schools and their staffs. Through their instrumentality, school districts with limited resources can often participate with other districts in the provision for facilities, leadership, transportation, and program development.

California State Department of Education

The California State Department of Education has been providing leadership and encouragement to the movement since its inception. Various Bureaus of the Department deserve credit for various activities. The Bureau of Health Education, Physical Education, and Recreation compiled and distributed a status report, "School Camping in California." in May, 1950. An illustrated publication followed in 1952 titled, "Camping and Outdoor Education in California." A progress report, "Conservation Education Through School Camping in California Elementary Schools" was distributed in 1955, again in 1956, and 1958, followed by the bulletin "Outdoor Science and Conservation Education in the California Public Schools 1959-60."

The Bureau of Elementary-Secondary Education has given valuable leadership to the program. This Bureau has given increased attention to the stimulation of outdoor education in late years, has been assisting in curriculum development, preparation of publications, and frequently works closely with the Association of Outdoor Education.



In January, 1968, the State Department of Education appointed Rudolph J. H. Schafer of Los Angeles as the executive secretary and consultant for the Conservation Education Advisory Committee to the State Board of Education. This position was financed by a grant from the federal government under Title V of the Elementary and Secondary Education Act of 1965. Although the Advisory Committee and its Executive Secretary are charged with primary responsibilities in the field of conservation, their work also has obvious implications in the area of outdoor education.

Other California State Agencies

The State Resources Agency is another segment of state government with a sustained interest in outdoor education. Their publication titled, "Status of Conservation Education in California Schools," issued in 1955, was an outgrowth of the work of the State Interdepartmental Conservation Education Committee. Other departments in the Resources Agency, such as the State Departments of Fish and Game, Parks and Recreation, and Conservation, have manifested cooperative interest in the program.

State Interdepartmental Conservation Education Committee

Dr. Roy E. Simpson, then Superintendent of Public Instruction, appointed a Conservation Education Committee in the State Department of Education in 1948. The purposes of the committee were:

(1) to focus attention on the importance of conservation education in the schools of California; (2) to study problems related to conservation education; (3) to initiate statewide activities to further conservation education; (4) to stimulate the development of conservation education programs at the local level; and (5) to coordinate the activities of various state departmental agencies contributing to conservation education. Dr. Jay D. Conner, then Associate Superintendent of Public Instruction, and Chief, Division of Instruction, served as the first chairman. Membership also included representatives of the Division of Instruction.

After the establishment of the committee, membership was extended to include representatives of the State Resources Agency and its Departments of Conservation, Fish and Game and Beaches and Parks. The committee was called "The State Interdepartmental Conservation Education Committee." It served as an important coordination and cooperation device in the effort to develop an effective statewide program in conservation education. The committee prepared resource materials and sponsored regional conferences on conservation of natural resources. For many years the State Interdepartmental Committee, with the co-sponsorship of the University of California and the State Department of Education, conducted annual state-wide conservation education work conferences.



At the present time, the inter-departmental group is not functioning. Instead, each agency, the State Resources Agency and the State Department of Education, maintain separate committees.

Joint Statement By Key Agencies

Further support to public school programs in outdoor science and conservation education was given by the signing, in July, 1967, of a joint policy statement by Norman B. Livermore, Administrator of the State Resources Agency, and Dr. Max Rafferty, State Superintendent of Public Instruction. The statement declared, in part:

"California's abundant, varied and productive natural resources have given its citizens a way of life that is envied worldwide. The successful continuance of this way of life depends basically on how we conserve, manage and utilize the resources that remain.

- "....To develop an informed public we must depend upon education to provide citizens with a broad understanding of the importance of a balanced resources management program in the State.
- "....It is essential that teachers of the State receive adequate training in the fundamentals of natural resources conservation, and that every student receive careful instruction in this vital subject.
- "....To obtain this objective, we, the Superintendent of Public Instruction and the Administrator of the Resources Agency of California, agree to coordinate our efforts, under the leadership of the Department of Education, in the development of an accelerated program of conservation education, in teacher training and in classroom instruction at all levels, designed to have far reaching beneficial effects on the moral, physical and economic status of California's citizens.

Active Professional Organizations

The continuing work of many state professional organizations has been a major influence in the development and expansion of outdoor education in California. Among these groups are the California Association of School Administrators, the California Association of Secondary School Administrators, the California Association of



Elementary School Administrators, the California Association for Supervision and Curriculum Development, the California Association for Health, Physical Education and Recreation and the Congress of Parents and Teachers. Among the most active, with its only purpose being to support and promote outdoor education activities of all kinds, has been the Association For Outdoor Education.

Association For Outdoor Education

The Association for Outdoor Education organized in 1954 and incorporated in 1955. It was formed to meet the needs of a rapidly expanding group of professional workers in outdoor education to get together to share experiences of children through the use of the out-of-doors as a laboratory for learning. This educational group, with a roster of over 225 in 1967, draws its membership from school superintendents and principals, outdoor school directors, teachers and counselors, county coordinators, classroom teachers, college professors and students, and interested citizens.

The purpose of the Association as stated in their Articles of Incorporation are to:

- 1- Awaken a wide and intelligent interest in school conducted camping and other outdoor education programs.
- 2- Acquire and disseminate accurate information and materials on school camping and outdoor education.
- 3- Encourage, sponsor, conduct, and participate in conferences, workshops, and other meetings concerned with problems relating to outdoor education.
- 4- Consider, study, and promote legislation related to camping, outdoor science, and conservation education.
- 5- Promote and foster programs of leadership.
- 6- Promote and organize programs of public enlightenment concerning the goals and objectives of outdoor education.

The Association for Outdoor Education believes:

a) That outdoor experiences consistent with the maturity level of pupils involved should be an essential part of every child's education.



- b) That the out-of-doors provides exceptional opportunities for enriching learning activities and should be used when consistent with good educational practices.
- c) That Outdoor Education can best complete the school program when it becomes an integral part of the total curriculum.
- d) That Outdoor Education springs logically from a desire to augment and enrich learning in the areas of conservation and natural science, but should also be an inevitable accompaniment to other segments of the curriculum such as social studies, art, music, language arts and mathematics.
- e) That Outdoor Education includes activities of both short and long duraction—a nature walk or a week in an outdoor school—provided the educational objectives are in harmony with the environment.
- f) That teachers should have the kind of training and experience that would result in their being able to teach children in the out-of-doors as well as in the traditional classroom setting.
- g) That the modern school system should provide Outdoor Education facilities, including outdoor schools, as a part of its total plant.
- h) That Outdoor Education experiences are uniquely able to give all children rich and significant growth in the areas of: Academic learning, Spiritual and aesthetic appreciation, Healthful living, Group relationships, Self-reliance, and Leisure-time skills.

The purposes of the Association are carried out through the activities of its sections, Northern and Southern California and Washington State, and the Board of Directors. This varied program includes:

- 1- Conducting annual fall workshops sponsored by the sections.
- 2- Conducting an annual spring membership conference for the entire membership.
- 3- Publication of a Newsletter.
- 4- Acting as a clearinghouse for information and publications pertaining to outdoor education.
- 5- Establishment of a central depository and library of materials and publications on outdoor education.



- 6- Providing consultant service to county offices, school districts, and schools anticipating the establishment of outdoor education programs.
- 7- Working cooperatively with national agencies and organizations interested in conservation and outdoor education.
- 8- Promoting conservation and outdoor education through state agencies and local organizations.
- 9- Encouraging teacher education programs to include experiences in outdoor education.
- 10- Assisting with recently developed Federal assistance programs such as the Job Corps, Title I and III (ESEA) projects.

After 12 years of experience in promoting and organizing outdoor education programs, the Association is taking its rightful place among other important educational leadership organizations in California. Its officers have made significant contributions of an advisory nature to state agencies and the legislature concerning the future of conservation and outdoor education.

LEGAL AUTHORITY FOR OUTDOOR EDUCATION

California Legislature Recognizes Worth of Outdoor Education

California law is clear regarding the legal right of school districts to provide various outdoor science and conservation education experiences for its students. Indeed, it encourages school districts to foster outdoor education as a vital part of the curriculum.

There has been a steady and sustained increase in the number of California elementary schools conducting programs in outdoor science and conservation education since the enactment of the outdoor science and conservation education law in 1951, i

This law has been contained in the Education Code of California as Section 6011 and authorizes the governing board of any school district to:



¹ Enacted as Assembly Bill 3389, September 22, 1951.

- (a) Conduct programs and classes in outdoor science education and conservation education within or without the boundaries of the school district, and for that purpose employ instructors, supervisors, and other personnel and provide necessary equipment and supplies.
- (b) Acquire and maintain real or personal property needed for outdoor science education and conservation education programs and classes either within or without the boundaries of the school district either by purchase, rental, lease, gift, or other means in the same manner as if the property were within the boundaries of the school district.
- (c) Contract with the United States, the State of California, any city, county, and city and county or school district therein, or any combination thereof for the joint operation and maintenance of such programs and classes in outdoor science education and conservation education or for assistance in their operation and maintenance.
- (d) Transport or arrange transportation of pupils, instructors, supervisors, or other personnel to or from places where such programs and classes are being conducted, whether within or without the district; provided _____ transportation is within the state and not in evolution of a radius of 180 miles from the school or so _____ of the district.2

Forestry Courses Authorized

In addition, Section 6012 sermits governing boards to:

- (a) Conduct courses in forestry, and for that purpose employ instructors and supervisors of classes, and acquire necessary equipment.
- (b) Acquire forest lands outside the boundary of the district by lease for a period not exceeding five years, or purchase or sell such lands in the same manner as lands within the boundary of the district are purchased or sold.
- (c) Afforest and reforest, and plant trees, shrubs, and vines on such lands, or upon any public lands which may be placed at its disposal, and enter into contracts and agreements with the government of the United States, the state, or any political subdivision thereof for such purpose.

(i) Transport pupils, instructors, or supervisors of classes to or from classes or places where such work is being done, whether within or without the district, in the same manner and subject to the same limitations as in transporting pupils to and from school.

Role of County Superintendent of Schools

In 1958 the California Legislature enacted still another law, amended slightly in 1968, which has had a salutary impact on developments in outdoor education. The role of the county superintendent of schools was clarified and strengthened. County superintendents as a result have been the medium through which cooperative outdoor education programs have developed and operated. Small school districts with limited resources, in particular, benefit by assistance from the county schools office which can initiate strengthen, and, in some cases, administrate programs embracing several school districts. Several Education Code sections describe the role of the county superintendent. These include:

- approval of the county board of education, enter into agreements with the governing board of one or more school districts to provide programs and classes in outdoor science education and conservation education for pupils in the district. Except as otherwise provided in this article, the agreement shall provide for the payment by the district of the actual cost of providing such programs or classes. The county superintendent of schools shall transfer from the funds of the district to the county school service fund the amounts set forth in the agreement.
- 6014. The school district or districts entering into such agreements with the county superintendent of schools may agree to make capital outlay expenditures, as well as pay for the other costs of the program. Title to all property acquired by such capital outlay expenditures shall be vested in the office of the county superintendent of schools, and participating school districts shall have no interest in such property, nor in the proceeds of any sale, lease, exchange, or other disposition of such property, unless the parties otherwise provide in the agreement which authorizes the acquisition of such property.
- 6015. Except as otherwise provided, all of the powers and duties authorized for governing boards of school districts by Section 6011 are powers and duties of the county superintendent of schools whenever, pursuant to this article, he provides programs and classes in outdoor science education and conservation education.



With these authorizations, school systems may proceed with plans involving the expenditure of school funds for facilities and leadership within or without districts in conducting experimental or continuing programs in outdoor science and conservation education. This may be done as (1) a separate district operation, (2) in cooperation with other school districts, (3) with co-opertive arrangements through the county superintendent of schools which may involve several school districts. It is anticipated that many additional school districts will initiate outdoor education programs during the next few years. School officials in almost every county are showing increasing interest, and plans are well along for initial starts in areas where no program has thus far actually existed.

Additional Legislation Strengthens Programs

New impetus has been given to outdoor science and conservation education programs by the passage, in 1968, cf Senate Bill 1. This act was developed primarily to clarify and simplify the school curriculum structure, but in the process, served to reinforce outdoor science and conservation through provisions of Section 8503 which requires that courses of study:

"....shall provide instruction at the appropriate elementary and secondary grade levels and subject areas ia....the protection and conservation of resources...."

This requirement is developed further in Section 8551, (c) relating to "Course of study for grades 1 through 6" which states that:

"....Instruction shall provide a foundation for understanding....resources....Iandl man's relation to his human and natural environment;...."

A similar statement is included in Section 8571 which describes requirements for secondary levels.

RECENT DEVELOPMENTS IN CALIFORNIA PROGRAMS OF OUTDOOR SCIENCE AND CONSERVATION EDUCATION

This current report of existing school programs in Outdoor Science and Conservation Education California, 1966-67, indicates that school use of the out-of-doors as a laboratory for learning is still growing. The resident outdoor education program has shown a respectable increase, and many other forms of outdoor learning experiences have been initiated throughout the state.



A comparison of previous reports on resident programs with the 1966-67 survey shows:

RESIDENT PROGRAMS

Numerical Increase

	<u>1953-54</u>	<u>1957-58</u>	<u>1959-60</u>	<u>1966-67</u>
Children	13,356	31,000	38,966	57,868
Classes	~	1,062	1,322	1,917
Schools	269	517	586	923
Districts	46	173	190	207

Percentage Increase

	<u>1954-58</u>	<u>1958-60</u>	1960-67
Children	132%	22.5%	32.7%
Classes		24.5%	31 %
Schools	108%	13.3%	36.5%
Districts	36.2%	9.8%	8.3%

The increase in numbers is obvious in all categories. Of some significance, too, are the percentage figures for the last seven year period. These percentages seem to substantiate a steady growth trend in resident programs, since the rates of growth are also higher (with one exception*) than those shown in the previous report.

Since publication of the 1959-60 survey report, a number of interesting programs have been developed which are worthy of special mention. It is encouraging that more are underway than can be adequately described in this document. The following are only samples and represent those activities for which details were currently available to the survey team.

The Day Use Program

The most rapidly growing phase of conservation and outdoor science education programs in California has been and continues to be the day-use program. This takes place, generally, in one of two patterns (1) development of school-owned nature centers on or near the school campus and available for pupils and teachers at any time, and (2) field trips to nearby city, county, state, federal or private nature areas for conservation education purposes.

^{*} The smaller rate of increase in number of districts does not necessarily suggest a loss or slowing trend. It is more of a reflection of district unifications in recent years.



The planning, developing, and maintaining of nature areas on or near school sites by the pupils and teachers frequently has triggered a wave of enthusiasm and concentration on learning in the outof-doors. Many examples of extensive development have taken place with ensuing benefits to pupils and teachers who then have a convenient and self-developed project available for all grade levels of the school.

One interesting example of development of outdoor learning areas on school sites is the current program in Contra Costa and Alameda Counties. Here, under the leadership of the county superintendent of schools office, educators are being encouraged and assisted to develop outdoor sites through a series of one-day "clinics". Advice and assistance is provided by teams from various interested Federal agencies. Experts from the Forest Service and Soil Conservation Service in the U. S. Department of Agriculture and National Park Service in the Department of the Interior are made available to school personnel at a central location. In some cases, team members will visit the site being developed to give additional aid. It is expected that about 50 schools will be involved in this program during the 1968-69 school year.

Federal Funds in Use

Title I, Elementary-Secondary Education Act federal funds have been of assistance in developing some programs and areas for out-door science and conservation education. Such help applies to implementing both the residential and day use type of activity. Evaluation of these Title I projects should provide research material that other school districts may profit by and which can give direction to many aspects of outdoor education.

Las Lomitas School District

In October, 1967, after a pilot project the previous year, the Las Lomitas School District sponsored a resident outdoor school program, for all its sixth graders at the San Francisco Y.M.C.A. Camp and Conference Grounds, La Honda. The instruction in the field was the responsibility of t' regular classroom teachers and student teachers from San Francisco State College.

San Bruno Park School District

The San Bruno Park School District has developed a ten-week spring resident outdoor school program for its fifth graders. In the fall, this district sponsors a Workshop in Outdoor Education for in-service teachers in cooperation with San Francisco State College's Extension Division.



S.T.E.P.

The Sausalito Teacher Education Project, sponsored by funds from the McAteer Compensatory Education Program, provides both children and pre-service teachers from San Francisco State College with the opportunity to spend ten days (summer, 1966) in an outpost camping education program in the Sierra Nevada. These 48 pupils, fiftheighth graders, organized into smaller living groups of 16 each, broadened their experiential backgrounds and gained new awareness of the outdoor environment.

Bowling Green School

The Bowling Green Elementary School of Sacramento, under the guidance of Norman Marsh, has developed an outdoor learning center on its school grounds in the form of a one acre arboretum. This outdoor laboratory simulates a native shrub area, a small forest area, an outdoor classroom, and a meadow with stream meandering into a bog.

HUSCICON

Teachers and other interested people in the Richmond Unified School District organized HUSCICON--humanities, science, conservation. One of HUSCICON's major aims is to provide a site where the children of Contra Costa County can learn about nature by "exploring nature on a face-to-face basis."

SCOPE

The Stanislaus County Outdoor Project in Education (SCOPE) was a Title I, ESEA Project that took place during the summer months at the San Francisco State College field campus in Sierra County. This unique program had as two of its major purposes (1) to broaden the experiential and educational horizons of culturally disadvantaged youth, and (2) to help prepare in-service teachers to work more effectively with culturally disadvantaged youth.

Napa Experimental Forest

The Napa Experimental Forest (a Title III, ESEA Project for the Napa Valley Unified School District) is a 360 acre facility located at Conn Dam. In addition to a science study field trip program for grades 4-12, a pre-vocational forestry program is offered for seventh and eighth grade boys. This unique program was the recipient of a 1967 Distinguished Service Award from the California Delinquency Prevention Commission.



Walnut Creek School District

For the past few years, the Walnut Creek School District has sponsored a spring resident outdoor school program in such locations as Samuel Taylor State Park, Mt. Tamalpais State Park, Mt. Diablo State Park, Calaveras Big Trees State Park, Norden and La Honda. Current plans involve twelve 6th grade classes from four schools at the San Francisco Y.M.C.A. Camp and Conference Grounds for a stay of one week.

Stanislaus County

In addition to their resident outdoor school program, Don Pedro School in Ceres has developed a weekend program at Old Oak Ranch for 3rd and 4th graders. County schools office personnel have provided the leadership for this program following a pilot program in the summer under Title I, ESEA.

* * *

This report of existing school programs in Outdoor Science and Conservation in California 1966-67 indicates clearly the steady and constant growth that has been experienced since the last report was issued by the State Department of Education in 1968. Several trends in outdoor education are suggested by this survey: increased use of short (non-resident) experiences to enrich instructional programs; increasing development of "natural" study areas on or near school grounds; greater utilization of outdoor experiences in culturally disadvantaged programs; very little use of Federal or other non-public-school funds in the development of, experimentation with or operation of outdoor programs, except the culturally disadvantaged ones; and, increasing interest and assistance from various non-school agencies and organizations in the whole realm of outdoor education and conservation education.



<u>APPENDIX</u>

The following two tables provide an overview of existing programs on a county basis. Additional statistical information from the 1966-67 survey will be available in "Supplement To Report On Conservation and Outdoor Science Education In California" to be published in January, 1969.



OVERVIEW BY COUNTIES OF DATA ON EXISTING OUTDOOR EDUCATION PROGRAMS 1966-67 RESIDENT PROGRAMS

COUNTIES	NUMBER OF DISTRICTS	NUMBER OF SCHOOLS	NUMBER OF CLASSES	NUMBER OF PUPILS
Alameda	1	1	2	20
Contra Costa	4	54	56	1,800
Fresno	3	3	13	400
Humboldt	1	:	3	75
Imperial	2	2	2	65
Inyo	7	6	7	110
Kern	2	2	9	250
Kings	1	1	4	100
Los Angeles	16	259	584	19,345
Madera	2	3	3	110
Merced	16	18	39	952
Marin	7	20	38	905
Mendocino	1	1	3	90
Monterey	8	17	27	745
Napa	1	33	90	1,820
Riverside	5	5	27	950
Sacramento	2	2	2	70
San Bernardino	4	14	45	1,124
San Di e go	17	186	430	15,106
San Joaquin	40	65	85	2,481
San Mateo	4	19	59	839
Santa Barbara	7	33	72	1,950
Santa Clara	9	65	144	4,272
Santa Cruz	4	14	26	666
Sonoma	7	7	25	762
Stanislaus	19	30	54	1,160
Sutter	6	10	8	112
Tulare	12	48	53	1,339
Ventura	1	4	7	200
Totals 29	209	923	1,917	57,868



OVERVIEW BY COUNTIES OF DATA ON CONSERVATION FIELD TRIPS AND SCHOOLGROUND NATURE AREAS 1966-67

	No. of Districts	No. of Districts Using
COUNTY	Using Field Trips	Their Own Nature Areas
Alameda	15	4
Calaveras	8	
Colusa	4	
Contra Costa	14	4
Fresno	6	1
Glenn	9	
Humboldt	1	
Imperial	2	
Inyo	1	
Kings	13	
Lassen	15	
Los Angeles	71	12
Madera	10	2
Marin	9	
Mariposa	1	
Mendocino	7	
Modoc	9	
Monterey	10	3
Napa	1	3
Plumas	1	
Riverside	26	5
Sacramento	15	10
San Benito	14	
San Bernardino	10	1
San Joaquin	15	2
San Luis Obispo	8	1
San Mateo	5	
Sonoma	5 5	
Stanislaus	10	1
Sutter	13	
Tuolumme	14	1
Totals	342	49

There is evidence that by school year 1968-69 the number of districts having their own nature areas will be from two to three times greater than this report indicates. Several counties reported that substantial steps in that direction are currently being taken.



SELECTED BIBLIOGRAPHY

ARTICLES and JOURNALS

- Journal of Outdoor Education, published by Northern Illinois University, Dekalb, Ill.
- Childhood Education, Vol. 44, No. 2, October, 1967. Entire issue.
- California Journal of Elementary Education, Vol. 26, No. 2, November, 1957, and Vol. 29, No. 2, November, 1960. Entire issues.
- Klumb, John, "Classroom Out-of-Doors," California Parent-Teacher, 39:16-17, August, 1963.
- Johnson, Verna, Natural Areas for Schools, Resources Agency, Sacramento, 1961.
- Teaching Science and Conservation in the Outdoors, Resources Agency and A.O.E., Sacramento, 1958.
- A Teacher's Guide for Teaching Science in the Outdoors, California State Department of Education, Sacramento, 1964.

BOOKS

- Freeberg, W. H. and Loren E. Taylor, <u>Programs in Outdoor Education</u>, Eurgess Publishing Company, Minneapolis, Minnesota, 1963.
- Hammerman, D. R. and W. M. Hammerman, <u>Teaching in the Outdoors</u>, Burgess Publishing Company, Minneapolis, Minnesota, 1964.
- Hug, J. and P. Wilson, <u>Curriculum Enrichment Outdoors</u>, Harper and Row, Publishers, New York, 1965.
- Mand, Charles L., Outdoor Education, Pratt and Company, New York, 1967.
- Smith, J. and R. Carlson, G. Donaldson, H. Masters, <u>Outdoor Education</u>, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1963.
- Stapp, William B., <u>Integrating Conservation and Outdoor Education into</u>
 the Curriculum, Burgess Publishing Company, Minneapolis, Minnesota, 1965.

FILMS

- "Just Beyond the Chalkboard," Northern Illinois University, Dekalb, Illinois.
- "Lands for Learning," U. S. Forest Service, San Francisco, California.
- "Chaparral Classroom," Los Angeles City Schools, California.
- "The Window," National Audubon Society, New York, N. Y.
- See Also "Composite List of Conservation and Related Subjects Film Titles," The Conservation League, New York, N. Y., 1959

77692-207 8-68 5M

